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INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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S-E-C-R-E-T

COUNTRY	East Germany	REPORT	
SUBJECT	1. Production of Electronic Tubes, Test Equipment, and Teleprinters in East Germany 2. East German Postal Authorities Interest in CCIR Standards for Television Transmissions	DATE DISTR.	10 December 1956
		NO. PAGES	3
		REQUIREMENT NO.	RD
DATE OF INFO.		REFERENCES	
PLACE & DATE ACQ.		This is UNEVALUATED Information	

SOURCE EVALUATIONS ARE DEFINITIVE APPRAISAL OF INFORMATION TENTATIVE

Tubes

1. The development and production of germanium diodes is to be transferred from the VEB Werk fuer Bauelemente der Nachrichtentechnik, Teltow, to the VEB Werk fuer Fernmeldewesen WF, Berlin-Oberschoeneweide, where a new production section is to be established. The semiconductor laboratory of Werk WF now contains six engineers and three skilled workmen. 25X1
2. The VEB Sachsenwerk Radeberg has asked Werk WF to develop a high voltage power supply unit for the 20-kV output klystron developed at Radeberg. 25X1
3. Difficulties are being experienced in the tool construction department of Werk WF, which is short of space, machine tools, and trained personnel, and cannot therefore keep pace with increased tube production. Arrangements are in hand to farm out this work to other factories. 25X1
4. It is confirmed that no development work is to begin until 1957 at Werk WF on the steep-slope triode EC 860 (adapted from the western type 437 A) and the double triode ECC 860 (adapted from the western type E 88 CC). 25X1
5. The amplifier triode EC 560 is to be put into production in October 1956; 30 per month are to be made.

Instruments

6. It has previously been reported that the production of test stands for transmitter tubes developed at Werk WF, Plan Number K6 - 268, was to be transferred to VEB Funkwerk Koepenick.¹ This position has now been reversed since it has become apparent that Koepenick is not able by itself to produce this instrument in bulk. The task of producing components for the instrument has therefore been divided between various electronics factories, including Werk WF, VEB Apparatewerk Treptow, and VEB Transformatoren- und Roentgenwerk, Dresden. At the moment, the tube department of Werk WF is able to test only at 10-kW output. It is hoped by the end of 1956 to be able to test VHF tubes at 12-kW output, with the new components then available.

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(Note: Washington distribution indicated by "X"; Field distribution by "#".)

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7. Completion of the program is not expected before the beginning of 1958 because of the difficulty of finding specialists capable of undertaking the work. An output klystron is required for this task. The power supply unit for this instrument is to be made in Werk WF, and a high voltage generator, also for the output klystron, is to be built in the Sachsenwerk Radeberg.

8. Field Strength Meter

By October 1956, Werk WF had not yet been able to overcome development difficulties, or to put into production the 3 - 30 mcs. field strength meter which has been ordered by the Soviet Union and has the Plan Number K6 - 150. Werk WF is under strong and continual pressure from the Soviets to produce and develop these instruments.

9. Test stand for Travelling Wave Tubes

A test stand for travelling wave tubes down to 13 cm has been completed in Werk WF. It has a figure of merit of 30. A rotating measuring circuit (rotierende Messleitung) for testing travelling wave tubes down to 10 - 20 cm has also been completed.

10. A test-amplifier down to 13 cm is being built at a works in Wilhelmshagen for the output triode EC 562.

Teleprinters

11. The export demand for teleprinters from East Germany is now so great that it has been proposed that a "combine" of electronics firms, including Werk WF, cooperate in producing the required number. At a meeting held at the end of September 1956 and attended by representatives from HV RFT (Main Administration Radio and Telecommunications of the Ministry of General Machine Construction) and from various electronic factories, it was suggested that the production of teleprinters could be speeded up by devising a method whereby suitable long distance transmission instruments could be linked to ordinary typewriters. It was considered that, for this purpose, a step-grate generator (Treppengenerator) with cold cathode thyatron could be used. Groups of five impulses per letter would be transmitted from the typewriter through the thyatron on differing voltages. It is planned to build a prototype by February 1957.

Television

12. The East German postal authorities have asked Werk WF for an estimate of the cost of a TV transmitter from OIR (Eastern) standards to CGIR (Western).² This news has caused consternation at the Sachsenwerk Radeberg where production of TV transmitters (to comply with OIR standards) has been suspended until the postal authorities have reached a decision.
13. Werk WF has delivered three sets of TV studio equipment, including cameras and recorders, power supply units, etc., to the postal authorities. This equipment was originally ordered for installation in vehicles for outdoor use. However, with the deliveries of outdoor equipment from PYE,³ Werk WF's equipment was remodelled for studio use.

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